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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR CONFIRMATION NO. ATTORNEY DOCKET NO. 02/26/2002 10/084,704 Gabor Devenyi 01W120 6376 7590 09/10/2003 Raytheon Company **EXAMINER** Bldg. EO/E01/E150 HANSEN, COLBY M 2000 East El Segundo Boulevard P.O. Box 902 **ART UNIT** PAPER NUMBER El Segundo, CA 90245 3682

Please find below and/or attached an Office communication concerning this application or proceeding.

			SW	
	Applicati n No.	Applicant(s)		
	10/084,704	DEVENYI, GABO	)R	
Offic Action Summary	Examin r	Art Unit		
	Colby Hansen	3682		
- Th MAILING DATE of this communication ap	opears on the cover	sheet with the corresp ndence a	ddress –	
Peri df r Reply		NDE 2 MONTH(S) EDOM		
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statu  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, howe ply within the statutory min d will apply and will expire s te, cause the application to	ver, may a reply be timely filed imum of thirty (30) days will be considered time SIX (6) MONTHS from the mailing date of this become ABANDONED (35 U.S.C. § 133).	ely. communication.	
1) Responsive to communication(s) filed on	·			
2a) This action is <b>FINAL</b> . 2b) ⊠ 1	This action is non-fi	nal.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disp sition of Claims  A) Claim(a) 1.17 in/ora panding in the application	on.			
4) Claim(s) 1-17 is/are pending in the application		ation		
4a) Of the above claim(s) is/are withdr	awii iioiii considera	adon.		
5) Claim(s) is/are allowed.				
6) Claim(s) <u>1-17</u> is/are rejected.				
7) Claim(s) is/are objected to.	los election require			
8) Claim(s) are subject to restriction and Application Papers	or election require	ment.		
9) The specification is objected to by the Examir	ner			
,—		r b)  objected to by the Examine	r.	
10)⊠ The drawing(s) filed on <u>26 February 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11) The proposed drawing correction filed on				
If approved, corrected drawings are required in reply to this Office action.				
12) The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. §§ 119 and 120		_		
13) Acknowledgment is made of a claim for forei	gn priority under 35	5 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:				
1. Certified copies of the priority docume	nts have been rece	ived.		
2. Certified copies of the priority docume				
3. Copies of the certified copies of the pr			al Stage	
application from the International E  * See the attached detailed Office action for a li	Bureau (PCT Rule 1	17.2(a)).		
14) Acknowledgment is made of a claim for dome	stic priority under 3	5 U.S.C. § 119(e) (to a provision	al application).	
a) The translation of the foreign language p	• •			
Attachment(s)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	4) 5) 6) 6	Interview Summary (PTO-413) Paper Notice of Informal Patent Application (POther:	• •	

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9, 10, 12-13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beery et al (US Pat. 3,654,816) in view of Devenyi (US Pat. 5,636,549).

Beery et al (US Pat. 3,654,816) discloses a leadscrew assembly comprising:

A leadscrew 16 comprising:

an cylindrical elongated shaft having an outer lateral surface and a rotational axis, and a leadscrew thread;

a hollow drive nut housing 30 comprising;

a nut bore having an unthreaded inner surface with the leadscrew being inserted through the nut bore, the nut bore being sized such that the leadscrew may rotate therein about the rotational axis, and

a spring pin 10 affixed to the drive nut housing and spanning across the nut bore to engage the leadscrew thread;

the spring pin has a first end, a central portion, and a second end, and wherein the first end and the second end are each affixed to the drive nut housing;

the first spring pin retainer 24 and the second spring pin retainer 26 each comprise openings in the drive nut housing;

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a motor 64 that rotationally drives the leadscrew;

and a linear slide mechanism 22 to which the drive nut housing is engaged.

However Beery et al (US Pat. 3,654,816) does not disclose the leadscrew comprising thread wire helically wrapped in spaced-apart turn upon the lateral surface and affixed to the elongated shaft.

Devenyi (US Pat. 5,636,549) discloses, with regard to claim 1, a leadscrew comprising an elongated shaft having an outer lateral surface and a rotational axis, and a leadscrew thread comprising a thread wire helically wrapped in spaced-apart turns upon the lateral surface and affixed to the elongated shaft.

Regarding claim 2, Devenyi (US Pat. 5,636,549) discloses a spacer wire having a size smaller than that of the thread wire and helically interwrapped about the elongated shaft with the thread wire.

Regarding claim 4, Devenyi (US Pat. 5,636,549) discloses a thread wire that has a circular cross section.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the helical wire thread of Devenyi (US Pat. 5,636,549) within Beery et al. so as to form a hard, smooth thread comprising a wear-resistant running surface for engagement with a bearing nut member as suggested by Devenyi (US Pat. 5,636,549).

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Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beery et al. in view of Devenyi (US Pat. 5,636,549), as applied to claims 1-7, 9, 10, 12-13, and 16 above, further in view of Devenyi (US Pat. 5,533,417).

Beery et al. discloses the claimed invention except for the drive nut housing having an access opening therethrough.

Devenyi (US Pat. 5,533,417) discloses a drive nut housing having an access opening therethrough (fig. 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the drive nut housing opening of Devenyi (US Pat. 5,533,417) within Beery et al. so as to form a housing that is cheaper to produce with an access open that allows for assembly of internal components that is easier, as suggested by Devenyi (US Pat. 5,533,417).

Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beery et al. in view of Devenyi (US Pat. 5,636,549), as applied to claims 1-7, 9, 10, 12-13, and 16 above, further in view of Pan (US Pat. 6,459,844).

Beery et al. discloses the claimed invention except for an optical filter supported on the linear slide mechanism.

Pan discloses an optical filter supported on a linear slide apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the optical filter mechanism of Pan within Beery et al. so as

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to sustain an accurate positioning of a slide assembly over a substantial time, as suggested by Pan.

### FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence <u>not</u> permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check <u>should not be</u> submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspond	ondence is being facsimile transmitted to the Patent and
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·	(Date)
Typed or printed name of person	n signing this certificate:
(Signature)	

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (703) 305-1036. The

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examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on (703) 308-3668. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen

Patent Examiner

Thomas R. Hannon
Primary Examiner